In the Claims

1. (Currently amended) An electrical interface, comprising:

a codec that generates two signal paths that together form an input differential pair;

a primary inductor and a secondary inductor for operably coupling ~~an~~ said input differential signal pair to an output differential signal pair, and

a filter that attenuates a signal occurring in the output differential signal pair.

2. (Original) The interface according to claim 1, wherein the filter acts as a low-pass filter and wherein the electrical interface further includes a high-pass filter, the low-pass filter and the high-pass filter having overlapping cut-off frequencies.

3. (Original) The interface according to claim 2, wherein the low-pass filter and the high-pass filter together attenuate signals over a frequency range of approximately 50 kHz to approximately 10 MHz.

4. (Original) The interface according to claim 1, wherein the primary inductor is connected between two signal paths forming the input differential signal pair.

5. (Original) The interface according to claim 4, wherein the primary inductor forms the primary winding of a transformer.

6. (Original) The interface according to claim 5, wherein the secondary inductor is connected between two signal paths forming the output differential signal pair and wherein the secondary inductor forms the secondary winding of the transformer.

7. (Original) The interface according to claim 1, further including a parasitic capacitor operably coupled between the primary inductor and the secondary inductor.

8. (Original) The interface according to claim 7, wherein the parasitic capacitor has a capacitance is in the range of approximately 0.5 pF to approximately 2.5 pF.

9. (Original) The interface according to claim 1, wherein the filter includes an output attenuation element for operably coupling a signal path of the output differential signal pair to ground.

10. (Original) The interface according to claim 9, wherein the output attenuation element includes a resistor and a capacitor connected in parallel.

11. (Original) The interface according to claim 9, wherein the output attenuation element forms a low-pass filter.

12. (Original) The interface according to claim 1, further including an input attenuation element operably coupled to at least one of the signal paths forming the input differential signal pair.

13. (Original) The interface according to claim 12, wherein the input attenuation element includes a resistor and a capacitor connected in series.

14. (Original) The interface according to claim 12, wherein the input attenuation element forms a high-pass filter.

15. (Original) The interface according to claim 1, wherein the filter attenuates a common mode signal in the output differential signal pair.

16. (Original) The interface according to claim 1, wherein the interface is adapted for being operably coupled between a codec and a digital circuit.

17. (Canceled)

18. (Currently amended) The interface according to claim [[17]] 1, further including an analog front end for operably coupling the codec to a telephone line.

19. (Original) The interface according to claim 18, wherein the analog front end includes circuitry for providing power to the codec from the telephone line.

20. (Original) The interface according to claim 18, wherein the analog front end includes a shunt regulator.

21. (Currently amended) An electrical interface, comprising:

a differential driver means for generating two signal paths that together form an input differential signal pair;

inductive means for operably coupling ~~an~~ said input differential signal pair to an output differential signal pair, and

filter means for attenuating a signal occurring in the output differential signal pair.

22. (Original) The interface according to claim 21, wherein the filter means attenuates high-frequency signals and wherein the electrical interface further includes a high-pass filtering means for attenuating low-frequency signals, the filter means and the high-pass filtering means having overlapping cut-off frequencies.

23. (Original) The electrical interface according to claim 21, wherein the inductive means is a transformer.

24. (Original) The electrical interface according to claim 21, wherein the inductive means includes a parasitic capacitor.

25. (Original) The interface according to claim 21, wherein the filter means includes an output attenuation element for operably coupling a signal path of the output differential signal pair to ground.

26. (Original) The interface according to claim 25, wherein the output attenuation element includes a resistor and a capacitor connected in parallel.

27. (Original) The interface according to claim 25, wherein the output attenuation element forms a low-pass filter.

28. (Original) The interface according to claim 21, further including an input attenuation means for attenuating low-frequency signals, the input attenuation means being operably coupled to at least one of the signal paths forming the input differential signal pair.

29. (Original) The interface according to claim 12, wherein the input attenuation element includes a resistor and a capacitor connected in series.

30. (Original) A method of interfacing an input differential signal pair to an output differential signal pair, the method comprising:

inductively coupling the input differential signal pair to an output differential signal pair, and

filtering out a common mode signal occurring in the output differential signal pair.

31. (Original) The method according to claim 30, wherein the inductively coupling step further includes the step of capacitively coupling at least one input signal in the input differential pair to at least one output signal in the output differential signal pair.

32. (Original) The method according to claim 31, wherein the step of capacitively coupling is performed with a capacitance in the range of approximately 0.5 pF to approximately 2.5 pF.

33. (Original) The method according to claim 30, wherein the filtering step further includes the step of attenuating high frequency signals with a low-pass filter and attenuating low frequency signals with a high-pass filter, the low-pass filter and the high-pass filter having overlapping cut-off frequencies.

34. (Original) The method according to claim 33, further including the step of attenuating signals over a frequency range of approximately 50 kHz to approximately 10 MHz.

35. (Original) The method according to claim 30, wherein the inductively coupling step includes the step of coupling the input and output differential signal pair through a transformer.

36. (Original) The method according to claim 30, wherein the filtering step includes the step of attenuating high-frequency signals in the output differential signal pair.

37. (Original) The method according to claim 30, further including the step of attenuating low-frequency signals in the input differential signal pair.